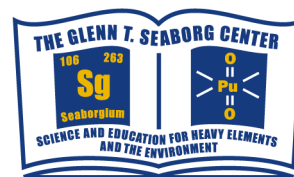




Glenn T. Seaborg Center Seminar



Prof. Carolyn J. Anderson

Division of Biology and Biomedical Sciences
Washington University School of Medicine

Copper-64 Labeled Biomolecules for Tumor Targeting

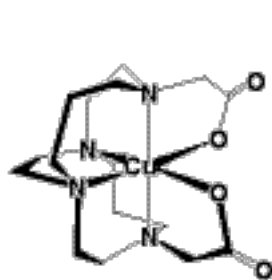
Wednesday, January 28, 2004

4 pm

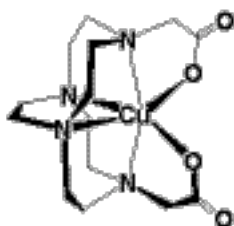
Building 70A-3377

Abstract

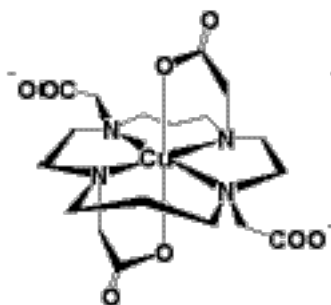
The major focus of our research is the development, evaluation and application of radiopharmaceuticals containing metal radionuclides for diagnostic imaging and radiotherapy. We are particularly interested in ^{64}Cu ($T_{1/2} = 12.7$ hours), in large part because it emits β^+ particles for positron emission tomography (PET) imaging and β^- particles for radiotherapy. One class of agents being studied is ^{64}Cu -labeled bifunctional chelator-receptor ligand conjugates for imaging and therapy of various types of cancer. The research involved in the development of ^{64}Cu -labeled tumor targeting agents is highly inter-disciplinary and involves synthetic chemistry, radiochemistry, biochemistry, cell biology and the imaging sciences.



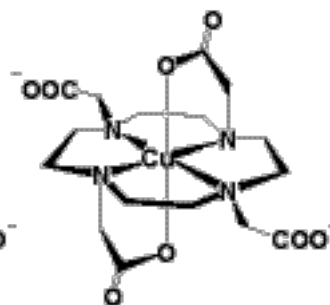
^{64}Cu -CB-TE2A



^{64}Cu -CB-DO2A



^{64}Cu -TETA



^{64}Cu -DOTA